



**University Revenue Growth
Adjusted for Inflation and Enrollment Change**

ISSUE

An examination of the historical revenues for Regents universities general education budgets considering enrollment changes and inflation.

AFFECTED AGENCIES

Board of Regents, University of Iowa, Iowa State University, and University of Northern Iowa

CODE AUTHORITY

Iowa Code Chapters 262, 263, 266, and 268

BACKGROUND

This *Issue Review* examines the three universities' actual revenues from State appropriations, tuition and fees, and other sources and compares those amounts to the revenues that would have been received if the general education budget had increased only for inflation and for enrollment growth.

The Regents universities' funding for the general education budget comes primarily from State appropriations and tuition and fees. Since FY 1988, on average 93.7% of the funding for educating students has come from these two sources. State appropriations go through the standard appropriations process with the Board of Regents submitting a departmental request, the Governor recommending an amount, and the appropriation being initially set by the Education Appropriations Subcommittee and finalized by the General Assembly. Tuition and fees are set by the Board of Regents taking into account budgetary needs, tuition rates at peer institutions, projected enrollment, anticipated State funding, inflation as projected by the Higher Education Price Index (HEPI), and other factors. Resident tuition covers a portion of the cost of education and is supplemented by the State appropriations. By Board policy, nonresident tuition should at least cover the full cost of education.

Each university has set aside a portion of the revenues from tuition and fees for financial aid to students. This funding is not available to pay for educational expenses and is netted out as a negative revenue and not included in the analysis. In FY 2012, the University of Iowa (UI) set aside \$80.2 million (21.9% of tuition and fee revenues); Iowa State University (ISU) set aside \$70.9 million (24.5% of tuition and fee revenues); and the University of Northern Iowa (UNI) set aside \$14.8 million (18.4% of tuition and fee revenues). This practice is being eliminated.

In FY 2010, the three universities received \$79.4 million from the federal American Recovery and Reinvestment Act (ARRA). **Table 1** shows the amount of ARRA funding and the

expenditures for each university. These amounts are included in the analysis as other revenues in FY 2010 and FY 2011.

Table 1
American Recovery and Reinvestment Act (ARRA) Funding for FY 2010

	U of Iowa	Iowa State	Northern Iowa	Total
ARRA Funding	\$ 35,393,382	\$ 31,595,952	\$ 12,376,464	\$79,365,798
Expenditures				
Salaries and Benefits	\$ 32,447,315	\$ 23,707,827	\$ 6,934,019	\$63,089,161
Student Aid	565,793	143,372	0	709,165
Professional/Scientific Supplies	1,484,875	3,264,289	3,714,991	8,464,155
Building Repairs, Plant Capitals, and Equip.	893,446	4,446,963	628,158	5,968,566
Other	1,953	33,501	1,099,296	1,134,750
Total	\$ 35,393,382	\$ 31,595,952	\$ 12,376,464	\$79,365,798

Note: Other for UNI includes \$1,070,162 in funding carried forward and spent in FY 2011.
Totals may not add due to rounding.

Enrollment

The three Regents universities have different proportions of resident and nonresident students and have had different growth rates since FY 1988. **Table 2** shows the enrollments by decade since FY 1988.

Table 2
Full-Time Equivalent Enrollment (FTEE)

Fiscal Year	University of Iowa			Iowa State University			University of Northern Iowa		
	Resident	Nonres.	Total	Resident	Nonres.	Total	Resident	Nonres.	Total
FY 1988	16,465 67.3%	7,998 32.7%	24,463	16,829 70.3%	7,102 29.7%	23,931	9,242 96.4%	346 3.6%	9,588
FY 1998	15,334 65.6%	8,024 34.4%	23,358	16,335 70.6%	6,789 29.4%	23,124	10,538 93.2%	771 6.8%	11,309
FY 2008	16,877 61.8%	10,423 38.2%	27,300	17,033 68.5%	7,847 31.5%	24,880	10,119 91.1%	988 8.9%	11,107
FY 2012	15,200 53.4%	13,260 46.6%	28,460	17,646 61.4%	11,102 38.6%	28,748	10,376 91.1%	1,017 8.9%	11,393
Total Increase	-1,265	5,262	3,997	817	4,000	4,817	1,134	671	1,805

The actual number of resident student FTEEs at the UI has decreased over the past 25 years while the number of nonresident students has increased. The proportion of nonresident

students has increased from 32.7% in FY 1988 to 46.6% in FY 2012. Iowa State University has had a small increase in resident students and a much larger increase in nonresident students. The student body is now made up of 38.6% nonresident students. The UNI is attended predominantly by Iowa residents, but the proportion of nonresident students has increased from 3.6% to 8.9% of the student body.

METHODOLOGY

The Board of Regents provided detail about revenues and expenditures for FY 1988 to FY 2012. Revenues are separated into appropriations, resident tuition and fees, nonresident tuition and fees, and other revenues. Tuition and fee revenues were allocated as resident and nonresident based on the ratio of nonresident to resident undergraduate tuition and the proportion of the student body FTEE classified as resident and nonresident.

The FY 1988 revenues served as the base year for the inflation and enrollment change calculations. Two adjustments were made to each type of revenue.

- A calculation for inflation was made for each year, increasing each revenue source by the percentage that the HEPI increased. The HEPI Index is higher education's equivalent to the Consumer Price Index and is based on a market basket of goods and services purchased by colleges and universities.
- To adjust for changes in enrollment, resident tuition and fees were increased by the percentage increase in resident FTEEs; nonresident tuition and fees were increased by the percentage increase of nonresident FTEEs. State appropriations are intended to supplement the costs of educating Iowa students, so appropriations were adjusted for the percentage change in resident enrollment. Other revenues were increased by the percentage change in total FTEE enrollment.

This analysis answers the question, "Compared to FY 1988, how much would the universities' revenues have increased if they had only increased for inflation and enrollment growth?" Actual budgetary decisions increase or decrease revenues and expenditures because of a variety of factors in addition to inflation and enrollment. For example, a university may increase revenues more than inflation to cover additional expenses if the budgetary decision was to increase salaries to be more competitive in attracting faculty. Or budgets could grow less than inflation, if new organizational efficiencies are implemented. This analysis examines the universities' revenues, assumes all other factors remain constant at the FY 1988 level, and asks how much would the revenues change considering only inflation and enrollment growth.

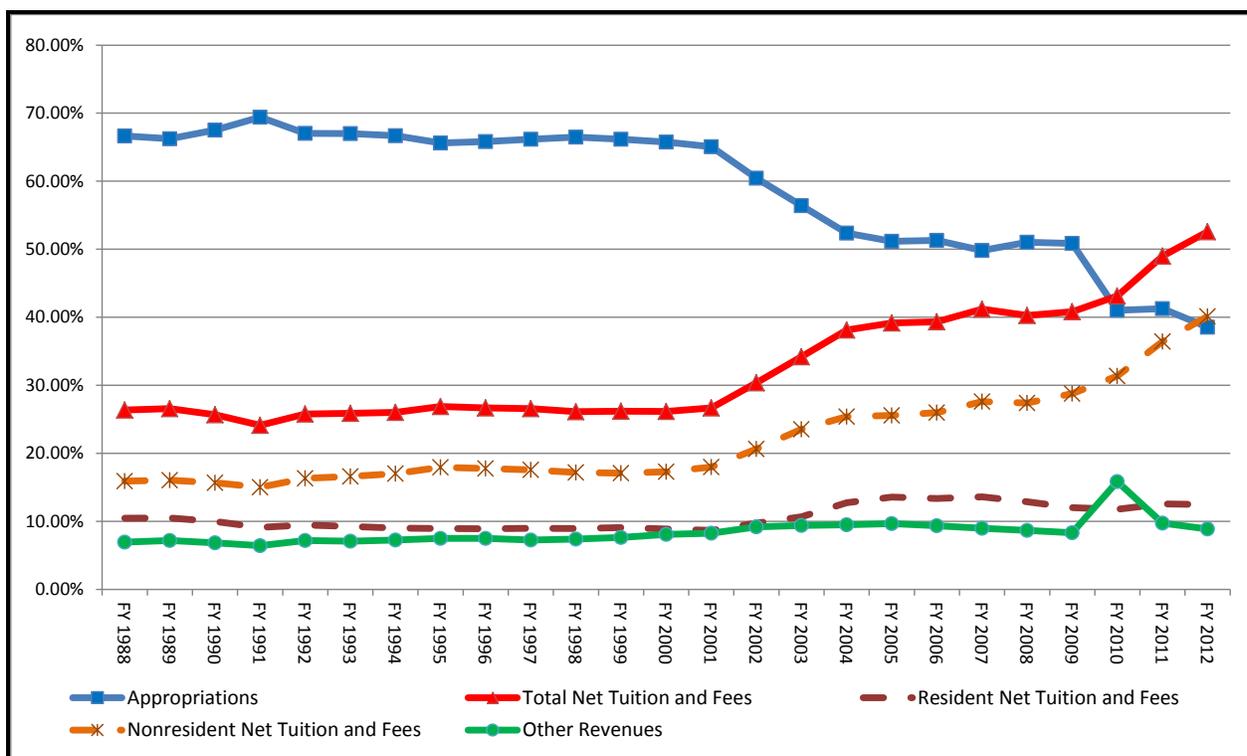
When adjusting for inflation, where one starts affects where one ends up. Examining a 25-year span produces a different ending amount for the inflation and enrollment adjustment than examining a 10-year period. For example, the FY 2012 adjusted total revenues for the three Regents universities would be \$1,127.5 million if the base year is FY 1988. If a 10-year period is examined, the FY 2012 adjusted total revenues would be \$1,161.5 million which is \$34.0 (3.0%) million more than the longer time frame. FY 1988 was chosen as base because that was as far back as the Regents could provide usable data.

Throughout this analysis, "adjusted revenues" will mean FY 1988 general education budget revenues increased for inflation and changes in enrollment. "Actual revenues" are the universities' general education budget revenues actually received for the fiscal year.

REVENUE IMPACT

Chart 1 shows the UI’s revenues from each source. Appropriations have declined from 66.7% of the UI’s general education budget in FY 1988 to 38.5% in FY 2012. The proportion of revenues from total tuition and fees grew from 26.4% in FY 1988 to 52.6% in FY 2012, thus covering 14.1% more of the general education budget than appropriations. The dashed lines show the percentages for resident and nonresident tuition and fees. The growth in tuition revenues comes primarily from nonresident tuition and fees which increased from 15.9% of the budget to 40.1%.

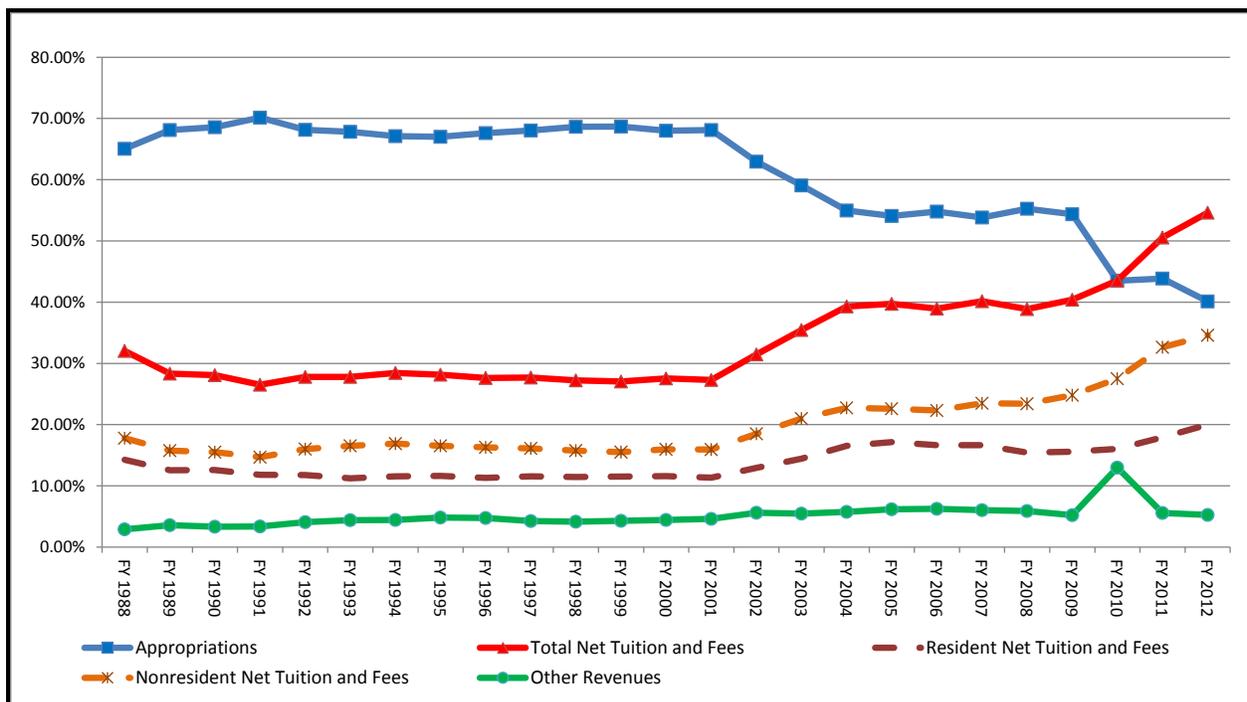
Chart 1
University of Iowa Revenues (Net of Tuition Set-Aside) by Source



The UI’s actual revenues have increased more than the combined effects of inflation and enrollment growth since FY 1988. **Table 3** shows that the UI’s actual revenues and adjusted revenues. Appropriations were \$85.9 million short of keeping up with inflation and enrollment change. Actual resident tuition revenues exceed adjusted resident tuition revenues by \$21.4 million in FY 2012, and nonresident tuition actual revenues exceeded adjusted revenues by \$93.8 million.

When appropriations decreased, tuition and fees and other revenues were increased to maintain revenue growth. Between FY 1989 and FY 2001, most of the difference between actual revenues and adjusted revenues is attributed to appropriations. Actual appropriation revenues exceeded adjusted appropriations revenues by an annual average of \$26.0 million, but after FY 2001, actual appropriations fell below adjusted appropriation revenues by an annual average of \$45.6 million.

Chart 2
Iowa State University - Percentage of Revenues (Net of Tuition Set-Aside) by Source



The actual total revenues at ISU failed to keep up with inflation and enrollment growth ending the 25-year period \$49.3 million less than the adjusted revenues. **Table 4** shows the actual and adjusted revenues at ISU. Actual appropriations ended the period \$109.1 million less than adjusted revenues. Actual resident tuition revenues were \$24.0 million more than adjusted resident tuition revenues, and nonresident tuition actual revenues outgrew inflation and enrollment change reaching \$28.2 million in FY 2012.

When appropriations decreased, tuition and fees and other revenues were increased, but the increase was not enough to keep up with inflation and enrollment growth. Between FY 1989 and FY 2001, the excess of actual revenues over adjusted revenues is attributed to appropriations. Actual appropriation revenues exceeded adjusted appropriations revenues by an annual average of \$12.1 million, but after FY 2001 actual appropriation revenues fell below adjusted appropriation revenues by an annual average of \$54.3 million.

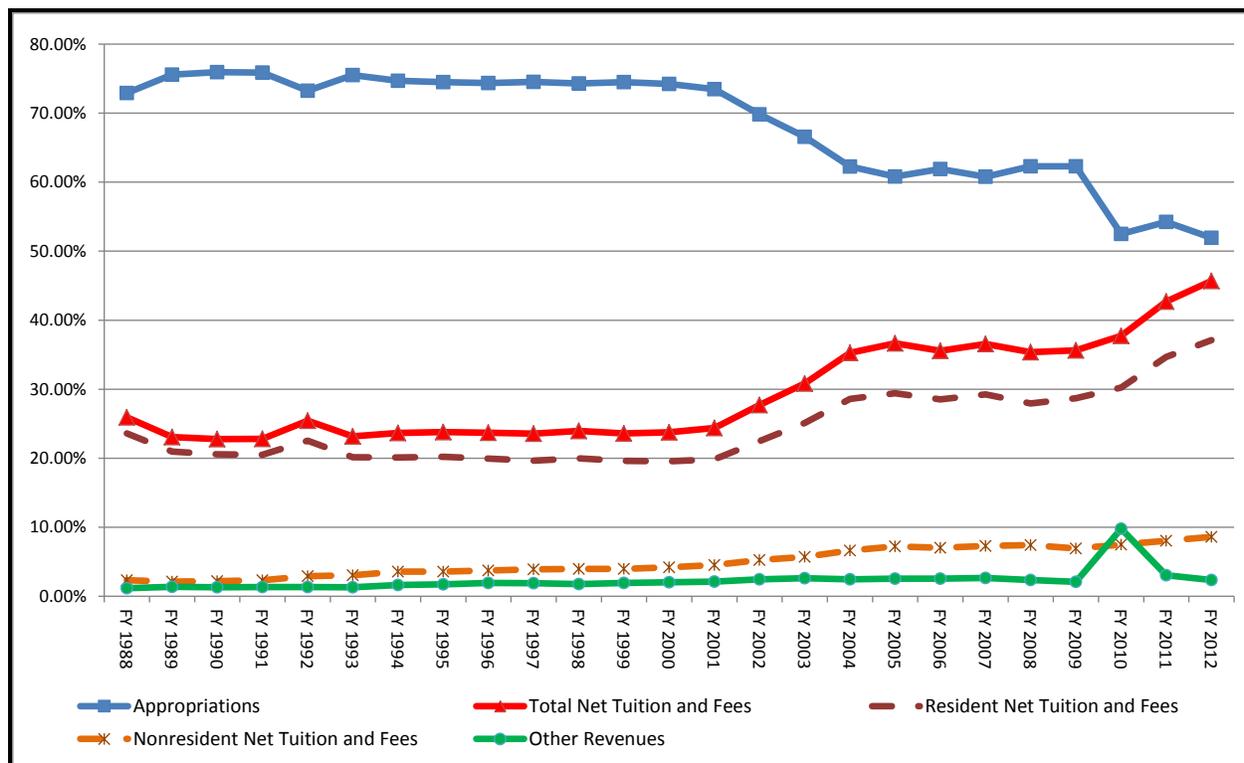
Both resident and nonresident tuition grew less than inflation and enrollment change through FY 2001 but then began to increase. After FY 2001, actual resident tuition and fee revenues averaged \$9.1 million more annually than the adjusted resident tuition and fee revenues, and actual nonresident tuition and fee revenues annually averaged \$11.4 million more than the corresponding adjusted revenues.

Table 4
Iowa State University Actual Revenues Compared to Adjusted Revenues

	Actual					Adjusted for Inflation and Enrollment Growth					Actual vs. Adjusted					
	Approp.	Resid.	Nonres.	Other	Total	Approp.	Resid.	Nonres.	Other	Total	Approp.	Resid.	Nonres.	Other	Total	
		Net	Net				Net	Net				Net	Net			Net
	Tuition & Fees	Tuition & Fees	Rev.	Rev.	Tuition & Fees	Tuition & Fees	Tuition & Fees	Rev.	Rev.	Tuition & Fees	Tuition & Fees	Rev.	Tuition & Fees	Rev.	Total Rev.	
FY 1988	\$ 112.4	\$ 23.8	\$ 31.5	\$ 5.0	\$ 172.8	\$ 112.4	\$ 23.8	\$ 31.5	\$ 5.0	\$ 172.8	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	
FY 1989	124.8	22.7	29.1	6.5	183.2	118.3	25.1	31.4	5.2	180.0	6.5	-2.4	-2.3	1.3	3.2	
FY 1990	133.5	24.0	30.7	6.5	194.6	126.2	26.8	32.8	5.5	191.2	7.3	-2.7	-2.1	0.9	3.4	
FY 1991	144.3	24.4	30.1	6.9	205.7	131.9	28.0	33.1	5.7	198.7	12.4	-3.5	-3.0	1.2	7.0	
FY 1992	135.9	24.7	30.8	8.1	199.4	135.6	28.8	34.4	5.9	204.7	0.3	-4.1	-3.7	2.2	-5.3	
FY 1993	145.4	25.2	34.3	9.4	214.4	136.2	28.9	37.6	6.1	208.8	9.2	-3.7	-3.3	3.4	5.6	
FY 1994	148.4	25.4	37.5	9.8	221.0	138.2	29.3	41.2	6.3	214.9	10.2	-3.9	-3.7	3.5	6.1	
FY 1995	151.3	25.8	37.8	10.9	225.8	139.8	29.7	41.3	6.3	217.2	11.5	-3.8	-3.5	4.5	8.7	
FY 1996	159.4	26.6	38.5	11.2	235.7	143.6	30.5	41.3	6.5	221.8	15.8	-3.9	-2.8	4.8	13.9	
FY 1997	167.7	28.0	40.3	10.5	246.5	150.5	31.9	43.0	6.8	232.2	17.2	-4.0	-2.7	3.8	14.3	
FY 1998	177.6	29.4	41.0	10.7	258.8	159.8	33.9	44.3	7.1	245.1	17.9	-4.5	-3.3	3.6	13.7	
FY 1999	185.6	30.8	42.3	11.6	270.3	165.1	35.0	45.1	7.3	252.6	20.5	-4.2	-2.8	4.3	17.8	
FY 2000	193.0	33.3	44.9	12.6	283.8	175.9	37.3	47.2	7.8	268.2	17.0	-4.0	-2.3	4.9	15.6	
FY 2001	202.5	34.2	47.0	13.7	297.4	190.5	40.4	52.1	8.5	291.5	12.0	-6.3	-5.1	5.3	5.9	
FY 2002	187.1	38.9	54.6	16.6	297.3	200.1	42.4	55.8	8.9	307.2	-13.0	-3.5	-1.2	7.7	-10.0	
FY 2003	183.1	45.3	64.7	17.0	310.1	212.4	45.1	60.2	9.5	327.2	-29.3	0.3	4.5	7.5	-17.1	
FY 2004	173.6	52.5	71.7	18.1	315.9	216.4	45.9	62.4	9.8	334.4	-42.7	6.6	9.3	8.4	-18.5	
FY 2005	173.3	54.5	72.8	19.8	320.4	217.2	46.1	63.1	9.8	336.2	-44.0	8.4	9.8	10.0	-15.8	
FY 2006	180.9	55.5	73.1	20.6	330.2	229.7	48.7	65.7	10.3	354.5	-48.8	6.8	7.4	10.3	-24.3	
FY 2007	183.8	58.6	78.5	20.6	341.4	232.8	49.4	67.7	10.5	360.4	-49.0	9.2	10.7	10.0	-19.0	
FY 2008	205.1	60.5	83.8	21.9	371.3	246.0	52.2	75.2	11.3	384.7	-40.9	8.3	8.6	10.6	-13.4	
FY 2009	212.2	63.0	94.7	20.3	390.2	253.0	53.7	84.3	11.9	402.9	-40.8	9.3	10.4	8.4	-12.7	
FY 2010	177.0	69.0	108.2	52.8	407.0	262.9	55.8	92.6	12.6	423.9	-85.9	13.2	15.6	40.2	-16.9	
FY 2011	173.7	74.7	125.7	22.1	396.2	268.2	56.9	103.0	13.3	441.4	-94.4	17.8	22.6	8.8	-45.2	
FY 2012	164.3	82.0	141.8	21.5	409.6	273.4	58.0	113.6	14.0	459.0	-109.1	24.0	28.2	7.6	-49.3	
Total Incr.	\$ 52.0	\$ 58.1	\$ 110.3	\$ 16.5	\$ 236.9	\$ 161.0	\$ 34.2	\$ 82.0	\$ 8.9	\$ 286.2						
											Number of Years Adjusted Exceeded Actual	11	14	14	0	12
											Number of Years Actual Exceeded Adjusted	13	10	10	24	12
											Annual Average	\$ -18.3	\$ 2.1	\$ 3.6	\$ 7.2	\$ -5.5

Chart 3 shows the proportions of UNI's revenues from each source for the period being examined. Appropriations provided 73.5% of the UNI's general education budget in FY 1988 but declined to 51.9% in FY 2012. The proportion of revenues from total tuition and fees grew from 25.3% in FY 1988 to 45.7% in FY 2012. Unlike the UI and ISU, appropriations pay 6.2% more of UNI's general education budget than tuition and fees. The dashed lines show the percentages for resident and nonresident tuition and fees. More of the growth comes from resident tuition and fees which increased from 23.6% of the budget to 37.1% while nonresident tuition and fees increased from 2.3% to 8.6% of the budget.

Chart 3
University of Northern Iowa Revenues (Net of Tuition Set-Aside) by Source



Like ISU, the actual total revenues for UNI failed to keep up with inflation and enrollment growth ending the 25-year period \$19.5 million less than the adjusted total revenues. **Table 5** shows the actual and adjusted revenues at the UNI. Appropriations did not keep up with inflation and enrollment change ending the period \$40.4 million less than the adjusted appropriation revenues. Resident and nonresident tuition revenues made up some of the appropriation decline by exceeding the adjusted tuition revenues by \$16.0 million and \$3.5 million, respectively.

The UNI does not have the nonresident student population to offset appropriation declines as was done at the UI and somewhat at ISU. When appropriations decreased, tuition and fees and other revenues were increased. Between FY 1989 and FY 2001, the difference between actual and adjusted revenues is attributed to appropriations the same as for the other two universities. Actual appropriation revenues exceeded adjusted appropriation revenues by an annual average of \$2.6 million, but after FY 2001 actual appropriation revenues fell below adjusted appropriation revenues by an annual average of \$18.7 million.

Between FY 1989 and FY 2001, resident and nonresident tuition and fee revenues grew less than inflation and the growth in enrollment. After FY 2001, tuition and fee revenues exceeded inflation and enrollment growth. Actual resident tuition and fee revenues averaged \$7.6 million more annually than the adjusted resident tuition and fee revenues, and actual nonresident tuition and fee revenues annually averaged \$2.1 million more than the corresponding adjusted revenues.

Table 5
University of Northern Iowa Actual Revenues Compared to Adjusted Revenues

	Actual				Adjusted for Inflation and Enrollment Growth					Actual vs. Adjusted						
	Approp.	Resid. Net	Nonres. Net	Other Rev.	Total Rev.	Approp.	Resid. Net	Nonres. Net	Other Rev.	Total Rev.	Approp.	Resid. Net	Nonres. Net	Other Rev.	Total Rev.	
		Tuition & Fees	Tuition & Fees				Tuition & Fees	Tuition & Fees				Tuition & Fees	Tuition & Fees			
FY 1988	\$ 44.4	\$ 14.4	\$ 1.4	\$ 0.7	\$ 60.9	\$ 44.4	\$ 14.4	\$ 1.4	\$ 0.7	\$ 60.9	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	
FY 1989	48.2	13.4	1.3	0.9	63.8	47.7	15.5	1.5	0.8	65.4	0.5	-2.1	-0.2	0.1	-1.6	
FY 1990	53.5	14.6	1.5	0.9	70.4	51.9	16.9	1.7	0.8	71.2	1.6	-2.3	-0.2	0.1	-0.8	
FY 1991	59.0	16.0	1.7	1.0	77.8	58.8	19.1	2.0	1.0	80.8	0.2	-3.1	-0.3	0.1	-3.0	
FY 1992	55.9	17.4	2.0	1.0	76.3	62.8	20.4	2.2	1.0	86.5	-6.9	-3.0	-0.3	0.0	-10.2	
FY 1993	64.9	17.6	2.3	1.1	85.9	63.7	20.7	2.6	1.0	88.0	1.2	-3.1	-0.3	0.1	-2.0	
FY 1994	66.2	18.2	2.8	1.4	88.6	64.3	20.9	3.0	1.1	89.3	1.9	-2.7	-0.2	0.4	-0.7	
FY 1995	68.1	18.5	3.3	1.6	91.5	64.8	21.1	3.5	1.1	90.4	3.3	-2.6	-0.2	0.5	1.1	
FY 1996	71.7	19.4	3.5	1.9	96.4	68.1	22.1	3.6	1.1	94.9	3.6	-2.8	-0.1	0.7	1.5	
FY 1997	75.9	20.2	3.8	1.9	101.9	70.7	23.0	3.9	1.2	98.8	5.2	-2.8	-0.1	0.8	3.1	
FY 1998	78.7	21.2	4.2	1.9	106.0	73.6	23.9	4.3	1.2	103.0	5.2	-2.7	-0.1	0.7	3.0	
FY 1999	82.9	21.9	4.4	2.1	111.3	76.0	24.7	4.4	1.3	106.4	6.9	-2.8	-0.1	0.9	4.8	
FY 2000	87.3	23.2	4.7	2.4	117.6	80.4	26.1	4.8	1.3	112.7	6.8	-2.9	-0.1	1.0	4.9	
FY 2001	90.6	24.8	5.3	2.6	123.4	86.6	28.1	5.5	1.5	121.6	4.1	-3.4	-0.1	1.2	1.7	
FY 2002	83.7	27.1	6.2	2.9	119.9	89.4	29.0	6.0	1.5	125.9	-5.6	-2.0	0.2	1.4	-6.0	
FY 2003	82.2	30.9	7.2	3.2	123.5	92.3	30.0	6.3	1.6	130.1	-10.1	0.9	0.9	1.7	-6.6	
FY 2004	78.0	36.2	7.9	3.1	125.3	92.3	30.0	6.2	1.6	130.0	-14.3	6.2	1.8	1.5	-4.8	
FY 2005	77.8	38.2	8.7	3.3	128.0	92.1	29.9	6.5	1.6	130.1	-14.3	8.2	2.2	1.7	-2.1	
FY 2006	82.3	38.0	9.3	3.4	133.0	96.4	31.3	7.3	1.6	136.6	-14.0	6.7	2.0	1.8	-3.6	
FY 2007	84.4	40.7	10.0	3.7	138.8	97.5	31.7	7.4	1.7	138.2	-13.1	9.0	2.6	2.0	0.6	
FY 2008	92.5	42.1	10.3	3.5	148.5	104.7	34.0	8.1	1.8	148.5	-12.2	8.1	2.3	1.7	0.0	
FY 2009	95.8	43.4	11.4	3.2	153.8	108.6	35.3	9.0	1.9	154.8	-12.8	8.1	2.4	1.4	-1.0	
FY 2010	80.4	46.7	11.1	15.0	153.2	112.4	36.5	8.6	1.9	159.5	-32.1	10.2	2.5	13.1	-6.3	
FY 2011	79.0	50.1	12.1	4.4	145.6	115.7	37.6	9.2	2.0	164.5	-36.7	12.5	2.8	2.4	-18.9	
FY 2012	74.7	53.4	12.4	3.4	143.9	115.1	37.4	8.9	2.0	163.4	-40.4	16.0	3.5	1.4	-19.5	
Total Incr.	\$ 30.4	\$ 39.0	\$ 11.0	\$ 2.7	\$ 83.0	\$ 70.7	\$ 23.0	\$ 7.5	\$ 1.2	\$ 102.5						
											Number of Years Adjusted Exceeded Actual	12	14	13	1	16
											Number of Years Actual Exceeded Adjusted	12	10	11	23	8
											Annual Average	\$ -7.2	\$ 2.0	\$ 0.9	\$ 1.5	\$ -2.8

Table 6 combines the three universities. The system's total revenues did not keep pace with inflation and enrollment changes, ending FY 2012 with actual total revenues \$29.8 million less than the adjusted total revenues. Reductions in appropriations left the universities with total revenues of \$235.3 million less than appropriations adjusted for inflation and enrollment change. This shortfall was partially offset by resident and nonresident tuition and fees outpacing inflation and enrollment changes, by \$61.3 million and \$125.6 million, respectively.

